# Presentation to the Regional Transportation Commission

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# At the three previous meetings, we talked about WSDOT and its activities in Snohomish, King and Pierce Counties:

- Cabinet agency reporting to the Governor with legislatively approved budgets and programs.
- Operation and maintenance of many critical facilities; design and delivery of key transportation infrastructure projects.
- Participates in complicated processes for coordination of planning and funding new investments.

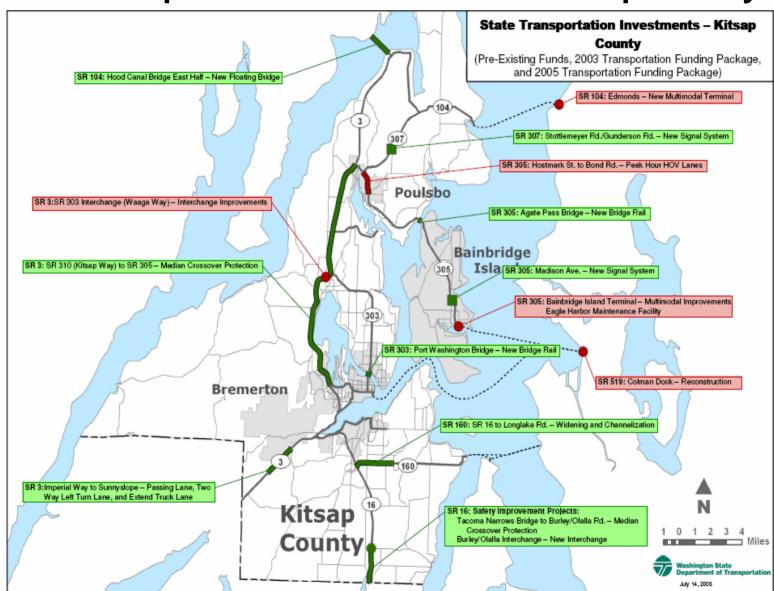
#### Today, we'll present information especially relevant to Kitsap County:

- Kitsap project map
- Washington State Ferries

#### And answers to recurring questions:

- More information on project evaluation and selection.
- More information on future funding prospects for transportation investment in Central Puget Sound Region.
- "Alignment" of goals, strategies and objectives.

### **State Transportation Investments in Kitsap County**



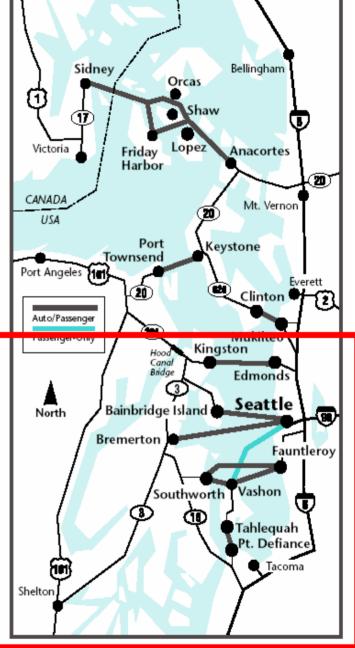
### Washington State Ferries Background

- Purchased by state from failing private ownership in 1951.
- Part of state highway system for expenditure eligibility rules of highway fund revenues. State Constitution amend. Article 18.
- Operating expenses at about \$193 million per year are 16% of total WSDOT operating expenses. Fare recovery ratios for operating expenses vary by route and now average about 73%.
- Capital expenses receive small federal earmarks; otherwise are wholly funded from WSDOT capital sources. Program for terminal and vessel preservation and replacement is approximately \$1.6 billion over the next 10 years.

# WSF is the largest ferry system in the United States and a major part of Central Puget Sound transportation picture

- Communities and travelers in King, Snohomish, Pierce and Kitsap counties are served by:
  - 8 routes, 12 terminals, 12 vessels
  - 128,000 sailings per year
  - Sailing completion rate 98%
  - On-time performance record of 93%

67% of **WSF** patronage is on routes serving Kitsap County and Vashon Island.



### WSF is a Major "Transit" System for Commuter Traffic in Central Puget Sound (Edmonds – Kingston south)

#### **Annual Riders by System (in millions):**

	Sounder	Kitsap Transit	WSF	ST Express	Com- munity Transit	Pierce County Transit	King County Metro
On Foot	1.3	4.1	5.1	8.7	9.1	12.2	96
In Vehicles	NA	NA	12.1	NA	NA	NA	NA
Total	1.3	4.1	17.2	8.7	9.1	12.2	96

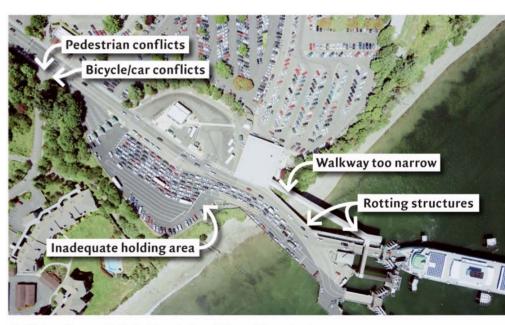
- WSF carries 600,000 vanpoolers and 200,000 carpoolers annually.
   Registered carpools and vanpools get priority loading on WSF routes.
- WSF carries 80,000 bicycles annually.
- During the peak hours 25%-30% of WSF riders transfer to or from a bus.
- 35-40% of WSF ridership is carried in the peak hours.

# **Current WSF Financial Summary**

- Chronic fiscal crisis for WSF since the Legislature ended support from motor vehicle tabs in 2000 following I-695.
  - Difficult operating expense environment with high fixed costs, mandated crewing rosters, expensive past practices in labor agreements.
     More pressure from security costs and high fuel prices.
  - Lagging investment in terminal upgrades and new vessels. Looming needs must be met to sustain service.
  - Competition with other across-thestate investment needs from highway fund sources.
- Legislative joint transportation committee currently sponsoring study to seek sustainable financial model.



**New replacement vessels** 



Deficiencies at Bainbridge Island Ferry Terminal

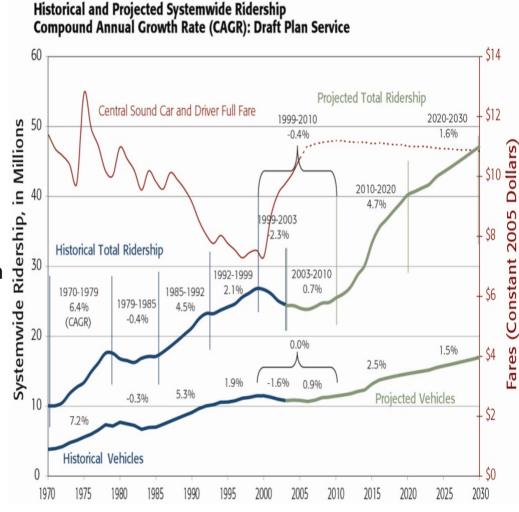
## Extensive WSF coordination with other regional entities

- PSRC provides demand forecast platform for route planning.
- Tariff Policy Committee brings local/legislative voices to fare policy deliberations.
- Local community impacts are coordinated through integration with local comprehensive plan reviews. "Ferry Advisory Committees" on routes assist with customer and schedule input.
- Kitsap Transit and Metro meet sailings; and sponsor vanpools.
   WSF also participates in regional "smart card" planning,
- Consultation with Tribes on treaty rights issues affecting routes and cultural resource issues at terminal locations
- Security and safety issues are closely coordinated with Washington State Patrol, U.S. Coast Guard and others.

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## Major WSF issues for short and long range regional transportation planning

- Is WSF using the right growth projections for future plans? What is WSF demand elasticity in the face of increasing fares?
- How do regional travel demands get balanced with local desires or objections? Will a new South Kitsap/Colman Dock large boat service be added to relieve Fauntleroy constraints?
- Will February 2007 vote in Kitsap County support second south Puget Sound ferry system to provide premium passenger service? (Kitsap Transit)
- Will third south Puget Sound ferry service be required to serve Vashon Island to downtown Seattle? (King County Metro)
- Will state legislative decisions on operating and capital subsidies affect WSF service levels, fares and capital investments if new regional funding is committed to premium passenger services?



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### Project evaluation and programming:

- Project evaluations and programming are two distinct stages in building transportation capital programs.
- Projects are proposed to satisfy needs identified by monitoring system performance.
- Project evaluation includes the technical analysis and detailing of the benefits and merits of each project and leads to various rankings of projects in priority order.
- Developing a program of projects includes the selection of projects, laying out schedules, and balancing the project investments against available funding. While supported by results of the evaluation process, programming also includes practical constraints such as legislative and other funding constraints and coordination with other proposed projects in construction sequences.

## At WSDOT, what analytic tools support project evaluation, selection and scheduling?

- As highway improvement projects are identified and taken through early planning and engineering, each is evaluated for:
  - Forecasted travel time savings
  - Estimated collision reduction/safety
  - Environmental improvement
  - Support of transit/HOV/pedestrians
  - Local support and other considerations
- Project values are identified, and for safety and mobility projects, use is made of "cost/benefit" tools. Project rankings are established, reviewed and revised at WSDOT.

## Project evaluation reports the project-level analysis

The next slide illustrates a summary provided by WSDOT to the RTID staff for:

US 2 Trestle – I-5 to SR 204 Eastbound Widening and Interchange Improvements

The handout provides similar summary materials for:

SR 99/244th SW to 238th SW Arterial HOV Lanes SR 509 / I-5 Freight and Congestion Relief Project SR 524: 24th Ave W to SR 527 I-405 Congestion Relief and Transit Projects

Detailed engineering analysis backs up these reports

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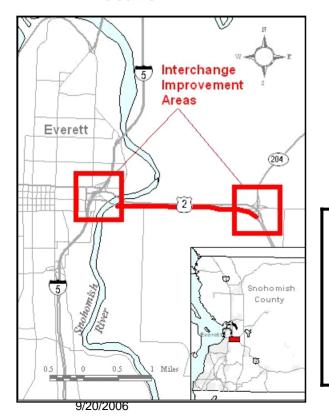


### District Projects in Snohomish County US 2 TRESTLE - I-5 TO SR 204 - EB WIDENING & INTERCHANGE IMPROVEMENTS

#### **Project Description** Lead Agency: WSDOT

This project will widen eastbound US 2 to 3 lanes, between Snohomish River and SR 204. The I-5 interchange ramps will be modified to accommodate the new eastbound 3-lane configuration. The US 2/SR 204 interchange will also be modified to match the eastbound US 2 3-lane configuration, with the westbound SR 204 ramp and westbound 20<sup>th</sup> St. ramp upgraded and realigned into the existing US 2 westbound

#### Location



#### **Schedule**

Phase Year
Design & RW 2005-15
Construction 2010-18

#### **Funding**

 Source
 Y.O.E. \$
 2004 \$

 District
 \$333,300
 \$213,917

 Total
 \$333.300
 \$213,917

(All Funding Dollars in Thousands) (Y.O.E. = Year of Expenditure Dollars) (Others funds include federal, state and local)

#### **Performance**

#### **Delay & Congestion**

**7,200** Less hours people spend in congestion each day.

**400** Less hours trucks spend in congestion each day.

**5,300** Less hours vehicles spend in congestion each day.

Less hours roadway is congested each day.

#### Capacity, Speed, & Safety

**8,700** More trips by people per day.

41% Increase in speed during evening commute.

**\$0.6** Million \$ saved annually from reduction in accidents

Through computer modeling, it is estimated that if this project is not built, traffic congestion will average 9 hours a day by 2015 and afternoon average travel speeds would be about 39 mph. By comparison, if the project is built, traffic congestion would be reduced to 5 hours a day and afternoon travel speeds could average 55 mph.

#### **What New Funding Will Achieve**

Construct a two lane ramp from northbound (NB) I-5 to eastbound (EB) US 2 reducing congestion and improving safety on I-5.

➤ Construct an additional lane EB on US 2 improving merge conditions for traffic from I-5 and Hewitt Ave and reducing congestion.

Construct an auxiliary lane on eastbound 2 from Hewitt Ave. on-ramp to the Snohomish River Bridge to improve traffic flow on Hewitt Ave.

Construct a two lane off ramp from EB US 2 to EB SR 204 matching the existing SR 204 roadway

>Reconstruct the merge of westbound (WB) SR 204, WB US 2 and WB 20th St. to current design standards improving the safety and capacity of this interchange.

➤ Provide enhanced water quality treatment for the rainfall which runs off of the roadway in this environmentally sensitive area.

### How project selection really works at the state level:

- At the Legislature, committee staff review the detailed and summary information in these kinds of evaluations.
- In 2003 and 2005 more than 400 individual projects were selected to receive funding from the Nickel and Transportation Partnership Account state transportation revenue packages.
- Projects were selected into the program and the construction sequence determined by the state Legislature. Many projects missed the cut!
- The projects plans commit every penny of the new revenue to 2023 (even as inflation now erodes future purchasing power of future gas tax receipts).
- Project selections made in the political arena usually (but not always) have good alignment with high-value, high-benefit projects as demonstrated by analysis. This may reflect strong intuitive understanding by decision makers of the strengths and weaknesses of the projects, even if the evaluative material seems to be invisible in the process.

### Project selection at the <u>regional</u> level:

- At PSRC, to include projects on its non-binding implementation plan. Many more projects than currently available funding.
- RTID's current "Blueprint for Progress" proposes funding for 34 projects for the 2007 ballot.
- Sound Transit is now picking from a list of 80 individual projects for the 2007 ballot.
- Every single project is being selected by the RTID Planning Committee or the Sound Transit Board of Directors.
- Many projects that make sense from a system perspective will miss the cut or have already been eliminated from consideration.
- WSDOT supplied evaluative information to RTID on all projects under consideration and to Sound Transit on all HOV/transit projects on State Highways. No explicit reliance has yet been placed on this material in the decision makers project selections either at RTID or Sound Transit.

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# Apart from marquee projects selected in a political arena, evaluative techniques are heavily relied on for WSDOT's programming decisions

- For example, project funding and scheduling for WSDOT bridge preservation, pavement preservation and seismic retrofit projects follow disciplined prioritization and programming processes.
- For purposes of illustration, the handout shows evaluative scorings for the Bridge Replacement Rehabilitation Program.
- These techniques are also used at WSDOT to prioritize the Legislature's program level appropriations for projects generally of modest scale that address, for example, "High Accident Locations" and "High Accident Corridors."

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# Why is this mixed process of engineering analysis and politics the "real life" picture of project selection?

- Legislative opinion (at the state Legislature and at RTID and Sound Transit acting in legislative capacities) is that project selection must be done in a way that will support favorable response on **funding.** Benefit or impact on overall transportation system performance may be well served but voter level politics are the driver.
- A recent study by Cambridge Systematics has suggested changes to programming categories and procedures. A somewhat skeptical legislature now has the study recommendations under advisement.

### What can be said of the inherent virtues and limitations of the analytic tools?

- Commonly used "cost/benefit" techniques capture only some measures of cost and benefit. "Corridor level" and "cross-modal" cost/benefit evaluations have proven elusive for various reasons, including lack of consensus on measurement of benefits and disagreements among agencies on transportation objectives.
- Cost/benefit and other models are value-laden and therefore prove of little use in providing "robust" results.
- Modeling processes fit poorly with project evaluation techniques and public involvement processes used in major projects that are taken through the NEPA or SEPA environmental impact statement process.

# What about "after the fact" analysis of projects to see if their claimed benefits are achieved as advertised?

- WSDOT performs some work of this kind. For example:
  - HOV system performance monitoring
  - SR 167/ I-405 ramp
  - I-5 HOV lane extension past Southcenter

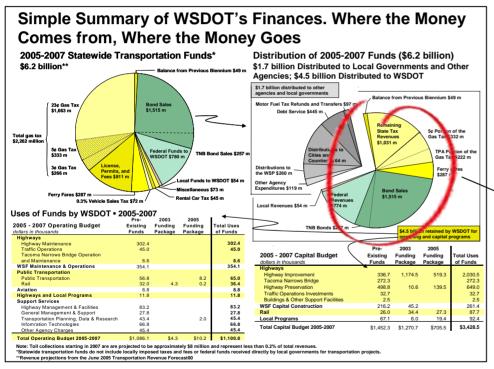
See handout

 Much more needs to be done in this area. Too often project and plan decisions are made without sufficient review of earlier project performance.

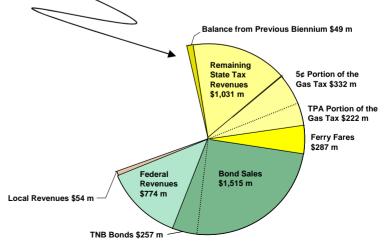
### IV

### Future funding prospects for transportation investment in the Central Puget Sound region – building on the Everett material.

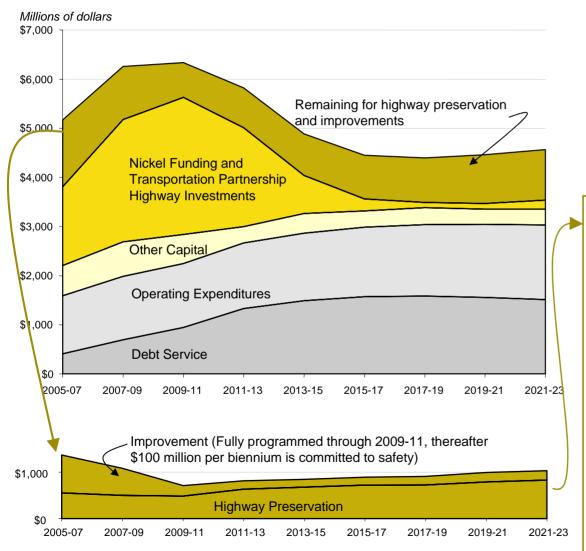
In Everett we presented the sources and uses of WSDOT's funds seen in a biennial snapshot.



Today we will look at the uses side of the picture moving from a two-year biennium (2005-07) to the sixteen year outlook based on WSDOT's current budgeting forecast.



State funding for investment not already contained in the Nickel and TPA Programs for the next sixteen years is very, very tight.



#### The look at the future assumes ...

- Conservative assumptions on operating program growth, and construction inflation.
- Liberal assumptions on continued revenue growth from fuel tax.
- No increase in current state tax rates and fee levels
- Continued favorable interest rate environment.
- No increase in state aid to locals above current planned levels.

#### What's the take-away?

Over the 18-years, the total remaining funds for highway preservation and improvements is about \$8.6 billion. In present value, that's about \$7 billion.

Of this \$7 billion about half is expected to be spent outside of the Puget Sound Region.

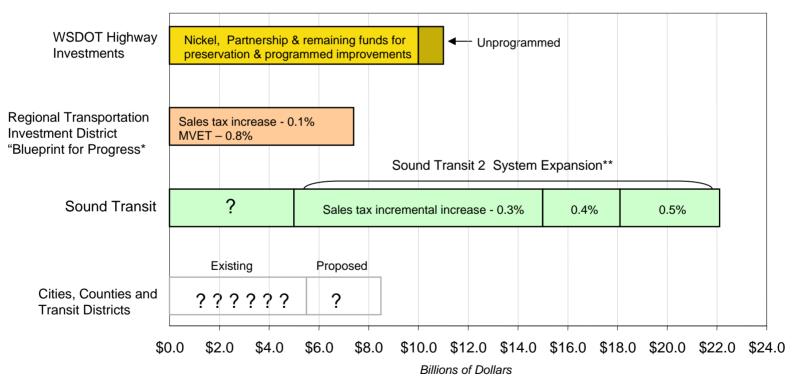
Of the \$3.5 billion remaining for the Puget Sound Region, \$3 billion or more will be spent on capital preservation investment in existing assets.

This leaves \$500 million to \$1 billion for investment in system extension and improvements ("new works") over 18 years.

### A rough *pro forma* adding potential regional and local funds still paints a very tight picture for the Puget Sound Region.

In addition to capital investments by the state, efforts are underway by RTID and Sound Transit and Local Governments in the Puget Sound Region.

#### Rough Concept Relative Scale of Future Investment Sources Under Discussion



<sup>\*</sup> The Blueprint investment level for RTID assumes a 0.1% sales tax and a 0.8% Motor Vehicle Excise Tax (MVET) and are in year of expenditure dollars. The amount displayed does not include debt service, bond reserves, or administrative costs.

<sup>\*\*</sup> The amounts for Sound Transit are investment options based on assumed sales tax increases and are displayed in year of expenditure dollars. These figures do not include debt service, bond reserves, or administrative costs. The dollar figures will change as the Sound Transit Board refines program scenarios and project schedules are updated.

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### V

### The elusive quest for "alignment" of objectives and measures

- Legislative standing goals and priorities in RCWs.
- Transportation benchmarks from 2002 Legislation.
- WSDOT Business Plan Strategic Initiatives.
- "Priorities of Government" Goals and Strategies.
- "Governor's Strategic Action Plan" High Level Objectives.
- Washington Transportation Plan Investment Priorities.
- WSDOT Gray Notebook Performance Measures.
- Ten performance audit topics underway at State Auditor's Office.

### Several attempts at reconciliation of requirements and directives are now under way

- Three projects completed by Transportation Performance Accountability Board before sunset last June.
  - Recommendations on state goals and benchmarks in RCW 47.01.012
  - Review of ten year investment criteria under RCW47.05.030 and 47.05.051
  - Recommended performance measures and benchmarks for Transportation Partnership Account expenditures
- Programming structure study completed for JTC by Cambridge Systematics last whenever.
- Forthcoming JTC study on ferry system financial situation.

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### TPAB report to Legislature illustrating overlapping statutory objectives and instructions

									Transportation Investment Criteria
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# Recent WSDOT portrayal of overlapping objectives and instructions

/OG Mobility Result: I WSDOT Strategic Initia- Ivos	ilt: Improve the Mobility of People, Goods and POG Gools & Strategies		Services WTP Investment Priorities	Governor's Action Plan	LegislativeBenchmark	s TPAB Goals & Objectives						
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